

**RECEIVED
CENTRAL FAX CENTER**

MAY 02 2007

APPLICANT(S): JACOBSEN, Eric
SERIAL NO.: 10/798,643
FILED: March 10, 2004
Page 4

second decoding algorithm to potentially flip a logic state of one or more bits, wherein said device comprises a network interface card (NIC).

16. (Currently amended) ~~The device of claim 11 comprising~~ A device comprising: a processor configured to decode received information using a first iterative decoding algorithm to converge a probability regarding bit logic states and after a last iteration, using a second decoding algorithm to potentially flip a logic state of one or more bits, wherein said device comprises an orthogonal frequency division multiplexing (OFDM) enabled transceiver.

17. (Original) The device of claim 11 comprising:

a receiver;

a digital processing portion coupled to the receiver; and

an antenna coupled to the receiver.

18. (Currently amended) A communication system comprising:

a radio frequency (RF) transceiver; and

a decoder coupled to the RF transceiver and adapted to decode received information using a first iterative decoding process and to further decode the received information using a second decoding process different than the first iterative decoding process, wherein said second decoding process comprises:

identifying one or more check nodes having lowest metrics after a stopping criterion is reached

identifying at least one of a bit node or edge having lowest metrics and associated with each identified check node, and

assessing parity relationships for the identified at least one bit node or edge.

19. (Original) The communication system of claim 18 comprising a wireless local area network (WLAN) access point (AP).

20. (Original) The communication system of claim 18 further comprising one or more antennas coupled to the RF transceiver.

CFC received 3 pages
missing 18 pages

APPLICANT(S): JACOBSEN, Eric
SERIAL NO.: 10/798,643
FILED: March 10, 2004
Page 5

21. (Original) The communication system of claim 18 comprising a cellular telephone.

22. (Original) The communication system of claim 18 comprising a personal computer.

23. (Original) The communication system of claim 18 comprising a base station.

24. (Canceled)

25. (Currently amended) ~~The method of claim 24 further~~ A method for decoding information comprising:

receiving coded information;

iteratively decoding the received information;

after a last iteration, flipping one or more bits of the decoded information having a low probability of a certain logic state; and

identifying one or more check nodes having lowest metrics.

26. (Original) The method of claim 25 further comprising:

assessing parity relationships of one or more bit nodes or edges associated with an identified check node.

27. (Original) The method of claim 26 wherein flipping one or more bits comprises changing a logic value of one or more bits associated with the assessed bit nodes or edges.